

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-005426**Date Inspected:** 07-Feb-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Luan Zhao Gang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG segment**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Steve Hall was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

OBG outside assembly (OBG segment 3BE)

This QA observed ZPMC qualified welding personnel identified as Mr. Hu Yacheng (069339) and Mr. Li Yong Shui (067656) perform SMAW weld repairs on weld joint identified as SEG016A-009. ZPMC QC identified as Mr. Wang Wei Ming was present to monitor the weld repair process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-SMAW-4G (4F)-FCM-repair.

OBG outside assembly (OBG segment 3AW)

This QA observed two cracked tack welds joining longitudinal diaphragms identified on the material as LD-015A and LD-016A to the bottom panel. These diaphragms are located on the out board side of floor beam at PP019. The tacks in question are located at the end of the joint past where ZPMC had terminated the weld joining the diaphragm to the bottom panel. ZPMC QC Certified Welding Inspector (CWI) identified as Mr. Luan Zhao Gang and ABF inspector identified as Mr. Wang Heng informed this QA that these tack welds will be repaired after the contractor joins this segment to its mating segment and completes the weld that has been intentionally left short to facilitate the fit up and welding of the mating segment. See attached photos.

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This QA observed ZPMC personnel grinding what appeared to be base metal edge weld repairs on connection plates for the floor beam diagonal bracing. There appeared to be four connection plates that had been repaired. ZPMC QC informed this QA that the repairs were needed in order to correct nicks and gouges in the edge of the plates created during the flame cutting process. See attached photo.

OBG outside assembly (OBG segment 3AE)

QA observed ZPMC personnel sand blasting the faying surfaces of the floor beam diagonal braces. No other significant work was observed on this segment while QA was present.

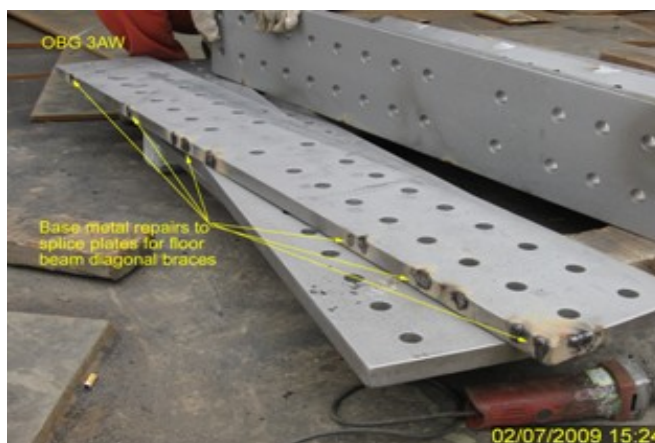
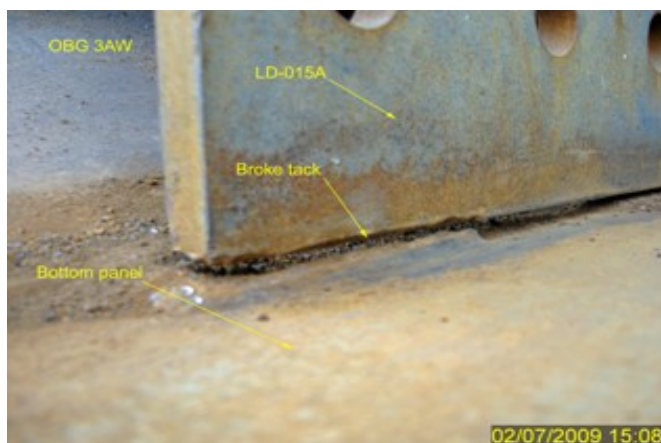
OBG outside assembly (OBG segment 4AE)

No significant work was being performed on this segment while QA was present.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

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## Summary of Conversations:

As mentioned above.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 15000422372, who represents the Office of Structural Materials for your project.

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| <b>Inspected By:</b> | Hall,Steven    | Quality Assurance Inspector |
| <b>Reviewed By:</b>  | Carreon,Albert | QA Reviewer                 |

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